Ministry of Northern Development and Mines

Ontario

Mines and Minerals Division

GEOLOGICAL DATA INVENTORY FOLIO

GDIF 542

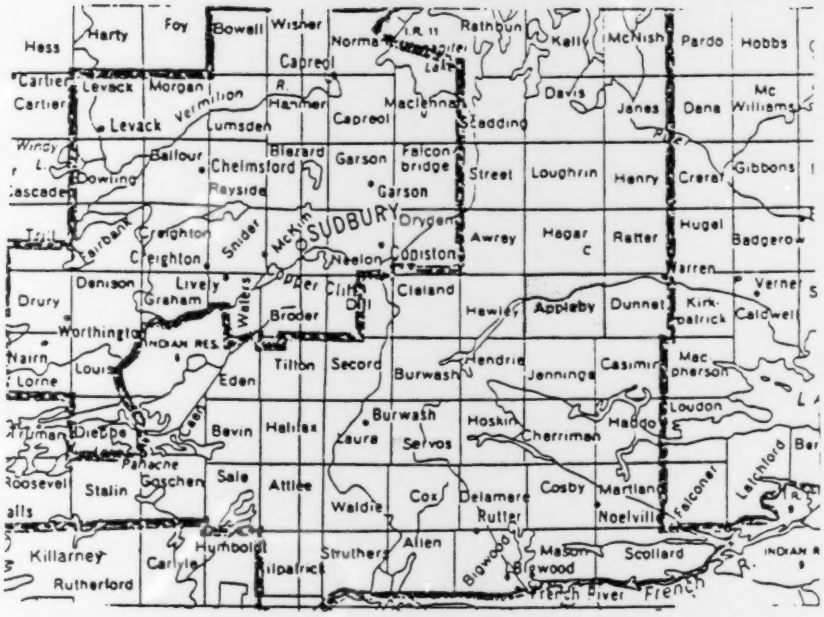
APPLEBY TOWNSHIP

Sudbury Mining Division

41I/7

Compiled by the staff of
the Resident Geologist's Office

SUDBURY



LOCATION MAP

CANADA ONTARIO
Mineral Development
Exploration
Minerale

This project is part of the five year Canada–Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

90-02993/

Mining Claim Map Number M.632

This project was funded under the Canada Ontario Mineral Development Agreement (COMDA), 1985-1990.

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey 1990.
Appleby Township, Geological Data Inventory Folio
compiled by the staff of the Resident Geologist's Office, Sudbury

Original Compilation by: Jerome, Lucille, April 1989.

Date	Page(s) Revised	Revised by		Date	Page(s) Revised	Revised by
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ACCOMPANYING MAPS (see map legends on outside back cover).

A. Files Index Map (s) ..... Map A-1

B. Exploration Data Map (s) ..... Map B-1

ABBREVIATIONS LIST

A.F.R.O.	Assessment Files Research Office (Toronto)
Ann. Rept. (A.R.)	Annual Report
A.R.I.P	Aggregate Resources Inventory Paper
Bull	Bulletin
C.I.M.M.	Canadian Institute of Mining and Metallurgy
C.J.E.S.	Canadian Journal of Earth Sciences
C.M.J.	Canadian Mining Journal
Econ. Geol.	Economic Geology
E.M.R.	Department of Energy, Mines and Resources
E.P.B.	Earth Physics Branch
G.A.C.	Geological Association of Canada
GC	Geological Circular
GDIF	Geological Data Inventory Folio
Geol.	Geology
Geol. Soc. Amer. Bull.	Geological Society of American Bulletin
GR	Geoscience (Geological) Report
GSC	Geological Survey of Canada
I.L.S.G.	Institute on Lake Superior Geology
IMR	Industrial Mineral Report
I.O.C.	Report of the Iron Ore Committee (1923)
Jour. (or J)	Journal
MDC	Mineral Deposit Circular
M.D.I. (R)	Mineral Deposit Inventory (Record)
Mem	Memoir
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MP	Miscellaneous Paper
MRC	Mineral Resources Circular
N.M.I.	National Mineral Inventory
NOEGTS	Northern Ontario Engineering Geology Terrain Study
NTS	National Topographic System
O.B.M.	Ontario Bureau of Mines
O.D.L.F.	Ontario Department of Lands and Forests
ODM	Ontario Department of Mines/Ontario Division of Mines
ODMNA	Ontario Department of Mines and Northern Affairs
OFR	Open File Report
OGS	Ontario Geological Survey
P.R.	Preliminary Report
Prelim. (or P)	Preliminary
R.C.	Royal Commission on Mineral Resources of Ontario (1890)
S.M.D.R.	Source Mineral Deposit Record
SOEGTS	Southern Ontario Engineering Geology Terrain Study
Sum. Rept.	Summary Report

*

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no': if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	L.J.
–	Assessment Files Research Office, Toronto	N.A.	L.J.
3	OGS/ODM General Index; 9 volumes	Yes	L.J.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	L.J.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	No	L.J.
6	ODM Industrial Mineral Reports	No	L.J.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	N.A.	L.J.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	No	L.J.
9	Newspaper Clippings File	No	L.J.
10	GSC Index to Publications	No	L.J.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	L.J.
12	OGS Index Maps	Yes	L.J.
13	Source Mineral Deposit Records (OGS)	No	L.J.
14	Author - Subject Articles File	Yes	L.J.
15	ODM/OGS Miscellaneous Papers	No	L.J.
16	ODM Geological Circulars	No	L.J.
17	OGS Study Series	No	L.J.
18	ODM Preliminary Reports	No	L.J.
19	ODM Bulletins	No	L.J.
20	ODM/OGS Open File Reports	Yes	L.J.
21	OGS Northern/Southern Ontario Engineering Geology Terrain Studies	Yes	L.J.
22	OGS Aggregate Resources Inventory Papers	No	L.J.
23	OGS Mineral Potential Maps	Yes	L.J.
24	Drill Core Library Catalogue	N.A.	L.J.
25	Theses on File, Sudbury	Yes	L.J.

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APPLEBY TOWNSHIP

MINERAL COMMODITIES REFERENCE LIST

anh	Anhydrite	gl	Gravel	ra	Radioactive minerals		ADDITIONS
ank	Ankerite	gyp	Gypsum	RE	Rare Earths		
ap	Apatite	hem	Hematite	sd	Sand		
arg	Argentite	Fe	Iron	sgl	Sand and gravel		
As	Arsenic	IF	Iron Formation	ss	Sandstone		
asp	Arsenopyrite	jas	Jasper	scap	Scapolite		
asb	Asbestos	ky	Kyanite	shee	Scheelite		
ba	Barite	Pb	Lead	serp	Serpentine		
be	Beryl	lim	Limonite	sh	Shale		
Bi	Bismuth	Li	Lithium	sid	Siderite		
bn	Bornite	mgst	Magnesite	si	Silica		
Cd	Cadmium	mag	Magnetite	Ag	Silver		
calc	Calcite	mc	Malachite	sl	Slate		
carb	Carbonate	Mn	Manganese	sm	Smaltite		
cc	Chalcocite	mb	Marble	sod	Sodalite		
cp	Chalcopyrite	mar	Marcasite	spec	Specularite		
ch	Chert	ma	Marl	sp	Sphalerite		
clay	Clay	mi	Mica	spd	Spodumene		
Co	Cobalt	mo	Molybdenite	s	Sulphides		
cob	Cobaltite	Mo	Molybdenum	talc	Talc		
Cu	Copper	mon	Monazite	Te	Tellurium		
cor	Corundum	ne	Nephelite (nepheline)	th	Thorite		
dol	Dolomite	Ni	Nickel	Th	Thorium		
ep	Epidote	Nb	Niobium	ti	Titanite		
fel	Feldspar	Pd	Palladium	Ti	Titanium		
fl	Fluorite (flurospar)	pent	Pentlandite	tour	Tourmaline		
fu.	Fuchsite	Pt	Platinum	W	Tungsten		
gn.	Galena	py	Pyrite	uran	Uraninite		
gt.	Garnet	pyl	Pyrochlore	U	Uranium	*	
goe	Goethite	po	Pyrrhotite	verm	Vermiculite		
Au	Gold	q	Quartz	Zn	Zinc		
gf	Graphite	qcv	Quartz carbonate vein	zr	Zircon		

▲ Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

MINERAL OCCURRENCES

Ref. Letter on Map	(see Exploration Data Map) Name(s)	Mineralization	REFERENCES IN SMDR-Source Mineral Deposit Record MDC-Mineral Deposits Circular, OGS IMR-Industrial Mineral Report, OGS MDI-Mineral Deposit Inventory NMI-National Mineral Inventory	Additional References and/or Remarks

TYPE OF WORK (see Files Index Map) EXPLORATION FILES		Numbers below represent the year in which the work was done; e.g., 68 for 1968																OTHER DATA IN THIS FILE, OR FOOTNOTES
Ref. No. on Map	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETIC	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETIC	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATION	SELF POTENTIAL	RESISTIVITY	

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

DRILLHOLE SUMMARY

Drilling Location Number on Map	(see Exploration Data Map) Company Name (file number)	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for

● —— indicates core stored at Drill Core Library

AIRBORNE GEOPHYSICAL SURVEY DATA

Number on File Index Map(s)	— by — for — year	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

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GEOCHEMICAL SURVEY DATA

(see Exploration Data Map)

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference

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GEOCHRONOLOGY DATA – AGE DATING

Site No. on Map	Method	Material	Reference	Result

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AERIAL PHOTOS; MOSAICS; IMAGERY

The following items are available for inspection at the Resident Geologists Office:

(a) Aerial Photographs:

(b) Photomosaics:

(c) Satellite Imagery:

TOPOGRAPHIC MAPS (selected)

scale	year	name and/or number	by
1:50,000	1975	Verner, 41 I/8	EMR
		Coniston, 41 I/7	EMR
1:100,000	1980	NOEGTS Data Base Map, Sudbury, Map 5003	OGS, Gartner, J.F.
		NOEGT Study 100, Sudbury	
1:1,200,000	1987	Surficial Geology of Northern Ontario, Map 2518	OGS, Sado, E.V. and Carswell, B.F.

NEWSPAPER CLIPPINGS FILE (selected)

PAPER	DATE	PAGE	"ARTICLE HEADLINE" OR COMPANY AND/OR SUBJECT

APPLEBY TOWNSHIP

OGS/ODM GENERAL INDEX SEARCH

Words Searched:
Anorthosite
Appleby Township

Index Volume	Listing:	Report Volume	Part	Page
8	Appleby Township, Sudbury District Geology of the Burwash Area	GR116		

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SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Card, K.D. and Lumbers, S.B.	1974-75	Sudbury-Cobalt Geological Compilation (revised)	OGS Map 2361	1"=4 mi.
Davis, G.L.	?	Geochronology and Geochemistry of the Grenville Province	Sudbury File 3-4	pp.224-230
Gupta, V.K.	1981	Bouguer Gravity and Generalized Geological Map, Sudbury-Onaping Lake Area	OGS Map P.2482	1:100,000
Gupta, V.K. and Wadge, D.R.	1980	Bouguer Gravity and Generalized Geological Map, North Bay-Marten River Area	OGS Map P.2297	1:100,000
Henderson, J.R.	1967	Structural and Petrographic Relations Across the Grenville Province, Southern Province Boundary, Sudbury, Ontario. Ph.D., McMaster University	Sudbury Theses File	
Lumbers, S.B.	1975	Geology of the Burwash Area, Districts of Nipissing, Parry Sound, Sudbury	GR116	
	1971	Burwash Area (East Half)	ODM Map P.681	1"=1 mi.
	1971	Burwash Area (West Half)	ODM Map P.680	1"=1 mi.
	1966	Burwash Sheet	ODM Map P.415	1"=2 mi.
ODM-GSC	1965	Aeromagnetic Map-Sudbury Sheet	7067G	1"=4 mi.
ODM-GSC	1965	Aeromagnetic Map-Verner	1500G	1"=1 mi.
ODM-GSC	1965	Aeromagnetic Map-Coniston	1510G	1"=1 mi.
OGS-GSC	1976	Uranium Reconnaissance Program, Airborne Gamma Ray Spectrometer Survey Sudbury	OGS Map P.1610	1:250,000

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Springer, J.	1978	Ontario Mineral Potential, Southern Part of Sudbury Sheet	OGS Map P.1511	1:250,000
Thomson, J.E.	1960	Uranium and Thorium Deposits at the Base of the Huronian System in the District of Sudbury	GR1	
Vos, M.A., and Smith, B.A.	1981	Industrial Minerals of the Sudbury Area	OFR 5329	

Note No.	NOTES

ADDENDA

CONVERSION FACTORS

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	6.451 6	cm^2
1 m^2	10.763 9	square feet	1 square foot	0.092 903 04	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
		VOLUME			
1 cm^3	0.061 02	cubic inches	1 cubic inch	16.387 064	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
		MASS			
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 908 8	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in cooperation with the Coal Association of Canada.

For further information please contact:

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APPLEBY TOWNSHIP

MAP LEGENDS

A. FILES INDEX MAP

FILE AREAS See pages 4-1,2 .... of text

- Reference number is always inside work area outlined. See listing in text pages.
- Small area of exploration data
- File covers whole township or area

B. EXPLORATION DATA MAP

MINERAL OCCURRENCES: See pages 3-1,2.... of text

- Mineral occurrence at surface, with reference letter
- Mineral occurrence with shaft, depth given with reference letter
- Mineral occurrence reported but exact location uncertain, with reference letter
- Mineralized float with reference letter
- Mineral occurrence encountered in drilling, with reference letter

DRILLHOLES: See pages 5-1,2.... of text

- Location of single drillhole, with reference number
- Location of group of closely spaced drillholes, with reference number
- Drillhole, exact location uncertain, with reference number
- Property with underground drillholes in this general area, with reference number
- Property with drillholes which have not been plotted on map, with reference number
- Reverse circulation drillhole; churn drilling, with reference number

GEOCHEMICAL: See pages 7-1,2....of text

- Geochemical sample site, with reference number
- Area of geochemical sampling, with reference number

GEOPHYSICAL ANOMALIES

Airborne Surveys: See pages 6-1,2.... of text

- AM — Airborne magnetic anomaly
- Airborne electromagnetic anomaly Length of anomaly along flight line
- Airborne electromagnetic anomaly Location of anomaly along flight line
- Airborne electromagnetic anomaly Conductor axis: definite, probable, possible
- AEM — Airborne electromagnetic anomaly Conductor axis: Location of flight lines uncertain
- ARA — Airborne radiometric anomaly

Ground Surveys

- M — Ground magnetic anomaly
- VL — Ground electromagnetic anomaly (VL - Vertical loop, HL - Horizontal loop VLF - Very low freq.; Turam; JEM - Crone Em - 16)
- RA — Ground radiometric anomaly
- IP — Induced polarization anomaly
- SP — Self potential anomaly
- AFMAG — Audio-frequency magnetic anomaly (total intensity)
- R — Resistivity anomaly
- GR — Gravity anomaly

GEOCHRONOLOGICAL DATA: See page 8 of text

- Age dating material sampling site, with reference number

MISCELLANEOUS DATA

- Trenching, pit
- Adit
- Sand and/or gravel pit
- Rock quarry
- Open pit

MAPS
NOT
FILMED

CARTES
OMISES